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Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name

Signature

Application Number	10/047,101	
Filing Date	January 17, 2002	
First Named Inventor	Daniel P. Carter	
Art Unit	3743	
Examiner Name	Tho V. Duong	
Attorney Docket Number	02207/11/61	

Total Number of Page	s in This Submission	10	Attorn	ey Docket Number	02207/11461			
		ENCL	DSURES	(check all that apply)				
Fee Transmittal Form		Assignment Papers (for an Application)			After Allowance Communication to Group			
Fee Attached	i	☐ Drawing(s)			Appeal Communication to Board of Appeals and Interferences			
Amendment / Res	sponse	Licensi	ng-relate	ed Papers	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)			
After Final		Petition	1		Proprietary Information			
Affidavits/dec	claration(s)		to Conv onal App		Status Letter			
Extension of Time	e Request			ey, Revocation espondence Address	Other Enclosure(s) (please identify below):			
Express Abandonment Request		Terminal Disclaimer Request for Refund			Certificate under 37 CFR 3.73(b) and copies of Assignment and other documents in chain of title			
☐ Information Disck	osure Statement	CD, NL	CD, Number of CD(s)					
Certified Copy of Document(s)	Priority	Rema	rks		RECEIVED			
Response to Miss				•	AUG 1 5 2003			
Incomplete Applic					TECHNOLOGY CENTER R3700			
Response to Parts under 3 1.52 or 1.53					TECHNOLOGY CENTER N3/00			
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Firm or Individual name	KENYON & KENY	ON by Shaw	n W. O'C	owd, Reg. No. 34,687				
Signature								
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	ormation unless it disolavs a valid QMB control number. 10,047,101
Application Number	
Filing Date	January 17, 2002
First Named Inventor	Daniel P. Carter
Art Unit	3743
Examiner Name	Tho V. Duong
Attorney Docket Number	02207/11461

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OR	ners at Cu	stomer Number					Laberr	1616			
Firm <i>or</i> Individua	al Name	Shawn W. O'Do	wd								
Address		Kenyon & Kenyo	on								
Address		1500 K Street, N	I.W.								
City		Washington		State	e DC		ZIP	20005			
Country		USA	····		_)E(VED
Telephone		(202) 220-4255		Fax	(202)	220-4201			REC	<u>ノニ</u>	VEID
I am the:		•							AUG	1 5	2003
Applica	ant/Invento	or.							•		
			erest. See 37 CFR 3		(ne)			TEC	CHNULU	IGY CE	NTER R37
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The	undersign		SNATURE of Application below) is em		-			behalf of t	the assig	nee.	
Name	Pam Ma				Title		ry of Pate				
Signature	Dan	Martin	Pe								
Date		ust 12,6	2003		Tele	phone	408/765	-1144			
	tures of @	Il the inventors of	r assignees of recorsignature is required			nterest o	r their re	presentat	ive(s) ar	e requi	red.
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This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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STATEM	ENT UNDER 37 CFR 3.73(b)	
Applicant/Patent Owner: Intel Corporatio		
Application No./Patent No.: 10/047,101	Filed/Issue Date: January 17, 2002	
Entitled: HEAT SINKS AND METHOD OF FORM	MATION	
	_, a	
(Name of Assignee)	(Type of Assignee, e.g., corporation, partnership, universit	y, government agency, etc.)
states that it is:	•	
1. X the assignee of the entire right, title,	, and interest; or	
2. an assignee of less than the entire r	right, title, and interest	
The extent (by percentage) of its	s ownership interest is %	
in the patent application/patent identified above b	by virtue of either:	
	patent application/patent identified above. The as ice at Reel <u>012790</u> , Frame <u>0454</u> , or for which a co	
OR		
B. A chain of title from the inventor(s), of the shown below:	patent application/patent identified above, to the o	current assignee as
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☐ Additional documents in the chain of	title are listed on a supplemental sheet.	
□ Copies of assignments or other documents in [NOTE: A separate copy (i.e., the original ass must be submitted to Assignment Division in recorded in the records of the USPTO. See No. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	signment document or a true copy of the original d accordance with 37 CFR Part 3, if the assignment	ocument) is to be
The undersigned (whose title is supplied below)	is empowered to sign this statement on behalf of t	he assignee.
Revolt 12, 2003	Sam Marlo	ck
O Date	Signature	
(408) 765-1144	Pam Matlock	
Telephone Number	Typed or printed nam	e
	Secretary of Patents	
	Title	

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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JUNE 12, 2002

PTAS

ANTONELLI, TERRY, STOUT & KRAUS, LLP DAVID C. OREN 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VIRGINIA 22209 Chief Information Officer Washington, DC 20231 www.uspto.gov



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RECORDATION DATE: 04/15/2002

REEL/FRAME: 012790/0454

NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

CARTER, DANIEL P.

DOC DATE: 04/11/2002

ASSIGNOR:

CROCKER, MICHAEL T.

DOC DATE: 04/09/2002

ASSIGNOR:

BROILI, BEN M.

DOC DATE: 04/11/2002

ASSIGNEE:

INTEL CORP.

2200 MISSION COLLEGE BLVD.

SC4-202

SANTA CLARA, CALIFORNIA 95052

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TECHNOLOGY CENTER R3700

SERIAL NUMBER: 10047101

PATENT NUMBER:

FILING DATE: 01/17/2002

ISSUE DATE:

012790/0454 PAGE 2

SHARON BROOKS, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

To the Commissioner of October and October DA	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office 102059468 2. Name and address of receiving party(ies): Name: INTEL CORP. Street Address: 2200 Mission College Blvd. SC4-202 City: Santa Clara State: California Country: U.S.A. Zip: 95052
3. Nature of conveyance: Assignment Merger Security Agreement Change of Name Other Execution Date: 1) 4/11/02; 2.) 4/9/02; & 3.) 4/11/02 4. Application number(s) or patent number(s): If this document is being filed together with a new application	Additional name(s) & address(es) attached? Yes No
A. Patent Application No.(s) 10/047,101 Additional numbers attached? Yes No	B. Patent No.(s) RECEIVED AUG 1 5 2003 TECHNOLOGY CENTER R3700
5. Name and address of party to whom correspondence concerning document should be mailed: Name: ANTONELLI, TERRY, STOUT & KRAUS, LLP Internal Address: Street Address: 1300 North Seventeenth Street Suite 1800 City: Arlington State: Virginia Zip: 22209	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41)
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9. Statement and signature. To the best of my knowledge and belief, the foregoing in copy of the original document. David C. Oren Name of Person Signing Attorney Registration No. 38,694 OMB No. 0651-0011 (exp. 4/94)	April 15, 2002 Date Total number of pages including cover sheet, attachments, and document: 5
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Attorney's Docket 219.40000X00 P11461

PATENT

ASSIGNMENT

(For Execution After Filing Patent Application)

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, 1.) Daniel P. CARTER, 2.) Michael T. CROCKER and 3.) Ben M. BROILI the undersigned, residing at 1.) 14668 Komedal Rd., Bainbridge Island, WA 98110, 2.) 715 N. 12th Street, Tacoma, WA 98403 and 3.) 3108 N. 25th Street, Tacoma, WA 98406, hereby sell, assign, and transfer to INTEL CORPORATION, a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, SC4-202 Santa Clara, CA 95052, ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the application for the United States patent that was filed January 17,2002 and assigned Application Serial No. 10/047,101, and is entitled HEAT SINKS AND METHOD OF FORMATION, and in and to said application and all divisional applications, continuation applications, continued prosecution applications. continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assigned assignment, grant, mortgage property herein conveyed heright to convey the same as	e, license, o as been mad herein expr	r other agreeme de to others by th	nt affecting the righ ne undersigned, an	ts and d that full
Date: 4/11	200	Name: Daniel I	P. CARTER	
Date:,	, 200	Name: Michae	T. CROCKER	
Date: 4/11/	, 200 <u>2</u>	Name: Ben M.	BROILI	·
State of:	} } ss.			
On this day of undersigned Notary Public,	personally a	200, before appeared	me,	, the
personally known to me be the person(s) whose nar acknowledged that	ne(s)	_subscribed to t		
WITNESS my hand and off	icial seal.			
		_	!	[SEAL]
Notary's Signature		- .		•

Assignment Return Address: ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 North Seventeenth Street, Suite 1800 Arlington, VA 22209 Telephone 703-312-6600

Attorney's Docket 219.40000X00 P11461

PATENT

(For Execution After Filing Patent Application)

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, 1.) Daniel P. CARTER, 2.) Michael T. CROCKER and 3.) Ben M. BROILI the undersigned, residing at 1.) 14668 Komedal Rd., Bainbridge Island, WA 98110, 2.) 715 N. 12th Street, Tacoma, WA 98403 and 3.) 3108 N. 25th Street, Tacoma, WA 98406, hereby sell, assign, and transfer to INTEL CORPORATION, a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, SC4-202 Santa Clara, CA 95052, ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the application for the United States patent that was filed January 17,2002 and assigned Application Serial No. 10/047,101, and is entitled HEAT SINKS AND METHOD OF FORMATION, and in and to said application and all divisional applications, continuation applications, continued prosecution applications, continuationin-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United

agree that said Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date:	, 200			
		Name: D	Daniel P. CARTER	
Date: 9 APRIL	, 200 <u>/</u> 2_	411	115./6 -	
		Name: M	lichael T. CROCKER	
Date:	, 200		·	
		Name: Be	en M. BROILI	
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State of: Washing	ow;			
County of: Alur	} ss.			
On this 9 day of	Apr:1	200 <u>حــ</u> , be	efore me, <u>Irenem Sarks</u> Michaet t. Cruc	
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WITNESS my hand and of	ficial seal.			
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Notary's Signature			Notary Public	7
			State of Washington IRENE M. SPARKS	. !
			My Appaintment Expires Feb 25, 2000	5

Assignment Return Address: ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 North Seventeenth Street, Suite 1800 Arlington, VA 22209 Telephone 703-312-6600